AMENDMENTS TO THE CLAIMS

Claims 1 – 28. (canceled)

29. (currently amended) A magnetic random access memory cell, said memory cell comprising:

a first magnetic layer over a conductive layer~~, said first magnetic layer comprising a first plurality of magnetic multilayer films~~;

a nonmagnetic tunnel barrier layer over said first magnetic layer; and

a second magnetic layer over said nonmagnetic tunnel barrier layer, said second magnetic layer comprising a ~~second~~ plurality of ~~magnetic multilayer~~ films, ~~an upper layer of which includes~~ and a chemical mechanical polishing stop ~~layer~~.

30. (previously presented) The memory cell of claim 29, wherein said first magnetic layer is a pinned layer.

31. (currently amended) The memory cell of claim 30, wherein said first magnetic ~~pinned~~ layer ~~comprises a plurality of layers~~ is arranged and configured to ~~produce~~ provide a ferromagnetic pinned layer.

32. (currently amended) The memory cell of claim 29, wherein said second magnetic layer ~~is~~ includes a sense layer.

33. (currently amended) The memory cell of claim 32, wherein said sense layer ~~comprises a plurality of layers~~ is arranged and configured to ~~produce~~ provide a ferromagnetic sense layer.

34. (previously presented) The memory cell of claim 29, wherein said nonmagnetic tunnel barrier layer comprises aluminum oxide.

35. (previously presented) The memory cell of claim 34, wherein said aluminum oxide has a thickness of about 5 to 25 Angstroms.

36. (previously presented) The memory cell of claim 29, wherein said nonmagnetic tunnel barrier layer comprises a material selected from the group consisting of copper, titanium oxide, magnesium oxide, silicon oxide and aluminum nitride.

37. (previously presented) The memory cell of claim 29, wherein said conductive layer is selected from the group consisting of copper, aluminum, tungsten and gold.

38. (currently amended) The memory cell of claim 29, wherein said first ~~plurality of~~ magnetic layer ~~films~~ comprises a first tantalum layer, a first nickel-iron layer, a manganese-iron layer, and a second nickel-iron layer.

39. (currently amended) The memory cell of claim 38 ~~29~~, wherein said ~~second~~ plurality of ~~magnetic multilayer~~ films comprises a third nickel-iron layer, a second tantalum layer, and a tungsten nitrogen chemical mechanical polishing stop ~~layer and a second tantalum layer~~.

40. (previously presented) The memory cell of claim 29, wherein said memory cell is coupled to at least one word line.

41. (currently amended) A memory circuit, said memory circuit comprising:

a plurality of memory cells, each memory cell comprising:

a first magnetic layer over a conductive layer, said first magnetic layer comprising a first plurality of ~~magnetic multilayer~~ films;

a nonmagnetic tunnel barrier layer over said first magnetic layer; and

a second magnetic layer over said nonmagnetic tunnel barrier layer, said second magnetic layer comprising a second plurality of ~~magnetic multilayer~~ films, including a free ferromagnetic layer, a tantalum layer, and ~~an upper layer of which~~

~~includes~~ a chemical mechanical polishing stop layer.

42. (previously presented) A processor system comprising at least one memory circuit, wherein said at least one memory circuit comprises at least one memory cell according to claim 29.

43. (currently amended) The memory cell of claim 29, wherein said chemical mechanical polishing stop ~~layer~~ comprises at least one of tungsten nitrogen, tantalum nitrogen, tungsten silicon nitrogen, and amorphous carbon.

44. (currently amended) The memory cell of claim 29, wherein said chemical mechanical polishing stop ~~layer~~ is an oxide.

45. (currently amended) A magnetic random access memory cell, said memory cell comprising:

a first magnetic layer adjacent a conductive layer, said first magnetic layer comprising a first plurality of ~~magnetic multilayer~~ films;

a nonmagnetic tunnel barrier layer separated from said conductive layer by said first magnetic layer; and

a second magnetic layer separated from said first magnetic layer by said nonmagnetic tunnel barrier layer, said second magnetic layer comprising a second

a second magnetic layer separated from said first magnetic layer by said nonmagnetic tunnel barrier layer, said second magnetic layer comprising a second plurality of ~~magnetic multilayer~~ films including a ferromagnetic material adjacent said nonmagnetic tunnel barrier layer, a tantalum film adjacent said ferromagnetic material, and; ~~an outer layer of which is~~

a chemical mechanical polishing stop ~~layer~~ arranged to protect said second magnetic layer.

46. (currently amended) The memory cell of claim 45, wherein said chemical mechanical polishing stop ~~layer~~ comprises at least one of tungsten nitrogen, tantalum nitrogen, tungsten silicon nitrogen, and amorphous carbon.

47. (currently amended) The memory cell of claim 45, wherein said chemical mechanical polishing stop ~~layer~~ is an oxide.

48. (currently amended) The memory cell of claim 45, wherein said chemical mechanical polishing stop ~~layer~~ is a nitride.